

**IN THE CLAIMS:**

Claim 1 (Currently Amended): A communication method over a cellular wireless communication network system, comprising:

connecting a plurality of base stations, ~~wherein said base stations are connected together~~  
with wireless communication; and

connecting a plurality of mobile stations, ~~wherein communication between~~ at least one of the plurality of base stations and at least one of ~~[[the]]~~ a plurality of mobile stations is ~~achieved~~ by a packet CDMA communication method, such that a packet of the packet CDMA communication method includes a frame composed of a preamble block having a barker code, ~~[[and]]~~ an information block having an orthogonal M series codes, and information about a phase,

wherein

an absolute phase and reverse spreading are determined from the information

about the phase included in the preamble block, and detected absolute phase

and reverse spreading are subjected to a phase correction and a frequency offset

correction, then resultant data is demodulated by an absolute synchronizing

detection.

Claim 2 (Withdrawn): A wireless communication network system as claimed in Claim 1, wherein said wireless communication with which said base stations are connected together, is achieved by an OFDM communication method.

Claim 3 (Currently Amended): The ~~wireless communication network system~~ method as claimed in Claim 1, wherein said wireless communication among the plurality of base stations is achieved by a Spread Spectrum CDMA (SS-CDMA) communication method.

Claims 4-5 (Cancelled).

Claim 6 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a multicode transmission method for both of a downlink and an uplink.

Claim 7 (Withdrawn): A wireless communication network system as claimed in Claim 6, wherein said multicode transmission method comprises:

assigning data to a plurality of different orthogonal spread code;

combining together the data assigned to the respective orthogonal code at the same time to compose one information block; and

adding said information block after the preamble block to compose the one frame when the information is transmitted.

Claim 8 (Withdrawn): A wireless communication network system as claimed in Claim 7, wherein said multicode transmission method comprises:

detecting said information block by a detection of said preamble,  
reversely spreading said spread code after a synchronization of the respective spread code has established which are included in the information block; and  
demodulating the data based on the respective spread code and synthesizing the respective data when the information is received to demodulate the whole information.

Claim 9 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a M-array transmission method for both of a downlink and an uplink.

Claim 10 (Withdrawn): A wireless communication network system as claimed in Claim 9, wherein said M-array transmission method comprises:

dividing the data and assigning the orthogonal spread code to the every data respectively;  
selecting the spread code in order of time base and combining together to compose one information block; and  
adding said information block after the preamble block to compose the one frame of the data when the information is transmitted.

Claim 11 (Withdrawn): A wireless communication network system as claimed in Claim 10, wherein said M-array transmission method comprises:

detecting said information block by a detection of said preamble;

establishing synchronization of the respective orthogonal spread code which are included in said information block;

generating a number of reverse spread code, the number of which corresponds to the number of spread code used based on the synchronizing signal;

reversely spreading the respective spread code which are included in said information block; and

demodulating the data through integral networks by comparing the resulted integrated value made by the respective integral networks when the information is received.

Claim 12 (Currently Amended): The ~~wireless communication network system~~ method as claimed in Claim 1, wherein an uplink communication between the at least one of the plurality of mobile stations and the at least one of the plurality of base stations, is achieved utilizing the Approximate Synchronized CDMA (AS-CDMA) method, such that a packet of the AS-CDMA method includes a frame having a synchronizing block and an information block, said information block includes the AS-CDMA code.

Claim 13 (Currently Amended): The ~~wireless communication network-system~~ method as claimed in Claim 1, wherein downlink communication between the at least one of the plurality of base stations and the at least one of the plurality of mobile stations, is achieved by information about ~~the phase included in the preamble block portion~~, such that information about the cellular wireless communication network system is determined from the information about the phase.

Claim 14 (Cancelled).

Claim 15 (Currently Amended): The ~~wireless communication network-system~~ method as claimed in Claim 1, wherein said base stations detect a correlation of data transmitted through downlink communication and uplink communication and determine a receiving timing of the data, such that a timing that said receiving timing becomes most suitable is calculated, and a most suitable timing is inserted as a timing controlling information in the frame for the downlink communication and send the data.

Claim 16 (Currently Amended): The ~~wireless communication network-system~~ method as claimed in Claim 15, wherein said mobile station establishes synchronization of spread code by detecting the spread code included in the preamble block of the frame transmitted through the downlink communication, performs reverse spreading of the spread code, demodulates resultant data through integral networks, extracts a transmission timing control information inserted in the transmitted frame, controls chip timing of the reverse spread code based on the transmission timing controlling information, transmits demodulated data through the uplink communication.